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WISDOM IS COMMON SENSE TO AN UNCOMMON DEGREE

THE CO-OP LINEMAN

RURAL ELECTRIFICATION ADMINISTRATION

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CO-OP LINEMAN WINS LIFESAVING MEDAL

THREE MORE STATES TO ADOPT SAFETY PROGRAM

Safety and Job Training Programs will soon be started in three more states -- South Carolina, Indiana and Nebraska. The three newcomers will swell the list of states using the program to eighteen.

In 1944, 405,000 miles of line were operated by REA-financed systems. Of this total, 203,000 miles, covered by Safety and Job Training Programs in 14 states, were operated with only one employee fatality. But ten employee fatalities occurred on the 202,000 miles in the states not covered by the program.

In addition to the three new states, Safety and Job Training is now in effect in Alabama, Georgia, Illinois, Iowa, Kentucky, Louisiana, Michigan, Mississippi, North Carolina, Ohio, Oklahoma, Tennessee, Texas, Virginia, and Wisconsin.

CAN YOU TOP THIS?

Manager H.E. Antle, Boone County R.E.M.C. Lebanon, Ind., advises Line Foreman Byron Davidson has worked 21,000 hours since August 15, 1936 without injury to himself. Truck mileage in excess of 225,000 miles was driven during this period without accident. Records like this don't just happen but are the result of carefully planned work, "Know How," and the observance of safe working principles.

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SUCCESSFUL RESUSCITATION

OF FELLOW WORKMAN

LEADS TO SAFETY COUNCIL AWARD

The National Safety Council announces that Bernard Cecil, line foreman for Salt River Rural Electric Cooperative, Bardstown, Kentucky, has been certified to receive the President's Medal for successfully resuscitating a fellow workman. The Certificate of Award has been received, and the medal will follow as soon as received from the manufacturers.

Here's how Foreman Cecil earned his award:

On March 27, a four-man crew was felling a tree near a 6900-volt line. A gust of wind caused the tree to fall toward the line instead of away from it. The lineman grabbed the winch line to pull the tree away but both tree and winch line fell into a 6900-volt primary, causing lineman to be knocked to the ground, unconscious.

Line Foreman Cecil immediately started Schaefer prone pressure resuscitation. After ten minutes, breathing started, and within fifteen minutes the injured regained consciousness.

THE LINEMAN congratulates Cecil on his achievement. We will publish additional information on other co-op employees who have won the same medal, as it becomes available.

The following excerpt from Manager J. S. Broadbous' letter, reporting the accident, offers a terse but effective recommendation of the REA Safety and Job Training Program:

"This cooperative is a member of the Safety and Job Training Program for Kentucky. I have always believed very much in the safety program and insist that all employees carry out all safety regulations, but after this accident I am more than ever a believer in the safety program."

Published Monthly in the Interest of Safety
for Employees of REA Systems

David A. Fleming, Editor

SHARP GAFFS PREVENT CLIMBING ACCIDENTS

Keeping gaffs sharp and filed to the proper shape will help prevent climbing accidents. A sharp file should be selected for this job. Do not use an emery wheel—heat generated by grinding will remove the temper.

THE SAFE WAY IS THE RIGHT WAY

Safety is just a short way of saying Job Training. Over the years, experience has proved that there are a number of different methods of doing the same job. Experience also has proved that some methods are basically unsafe and should be discarded, while others are safe and should be adopted. The first step in Job Training is to determine the proper method to be used for each job an REA lineman must do. Then the jobs must be broken down so that each step may be taught in its proper sequence. Linemen trained this way can work as a team; each man knows his part of the job, and he also knows how his fellow workman is going to do his part. Team-work gets the job done more quickly.

The post-war period will be a period of extensive electrical expansion both in new construction and in increased use of present lines and facilities. This means more jobs in the maintenance and operation of REA lines. The electrical industry—public, municipal and cooperative systems, plus construction contractors—will need more linemen. Some estimates of future manpower requirements run as high as double the number of skilled and semi-skilled men now available. Not only will Job Training supply these men, but it will also assure the successful and efficient operation of our systems. Considerable work already has been done in this field.

DOG BITES ARE DANGEROUS

Certain precautions should be taken in every dog-bite case. Apply iodine, or some good anti-septic to the wound to prevent infection.

Have owner confine dog for 10 days for observation. If dog is well at the end of this 10-day period, there is no danger of rabies and no treatment is required. If the dog dies, or is killed, before 10-day period is up, pack head in ice and send to State Health Department Laboratory for examination. If Laboratory reports the animal to be rabid—SEE YOUR DOCTOR AT ONCE—immediate treatment will be required.

Fig. 1

Side View



Slight Curve
(1/4 inch Radius)

Fig. 2

Front View



Slightly Rounded

"Sharp" does not mean needle point, but rather chisel edge. A needle point sticks in easier but has less holding power. Try this experiment: Take two wood chisels, one 1/4 inch and the other 3/8 inch; get a piece of soft wood and see with which chisel you can gouge out a piece of wood with the least effort. Now try a half-inch chisel. As the chisel width increases it takes more force to gouge out a chunk of wood; it also takes more force to make the chisel penetrate the wood. Proper gaff design gives maximum holding power with adequate penetration. Also, the slight curve at the tip (fig. 1) makes it easier to pull out of pole. Since the holding power of a sharp point is much less than a broad point, the needle point gaff is liable to "cut out" before reaching maximum penetration.

Fig. 3

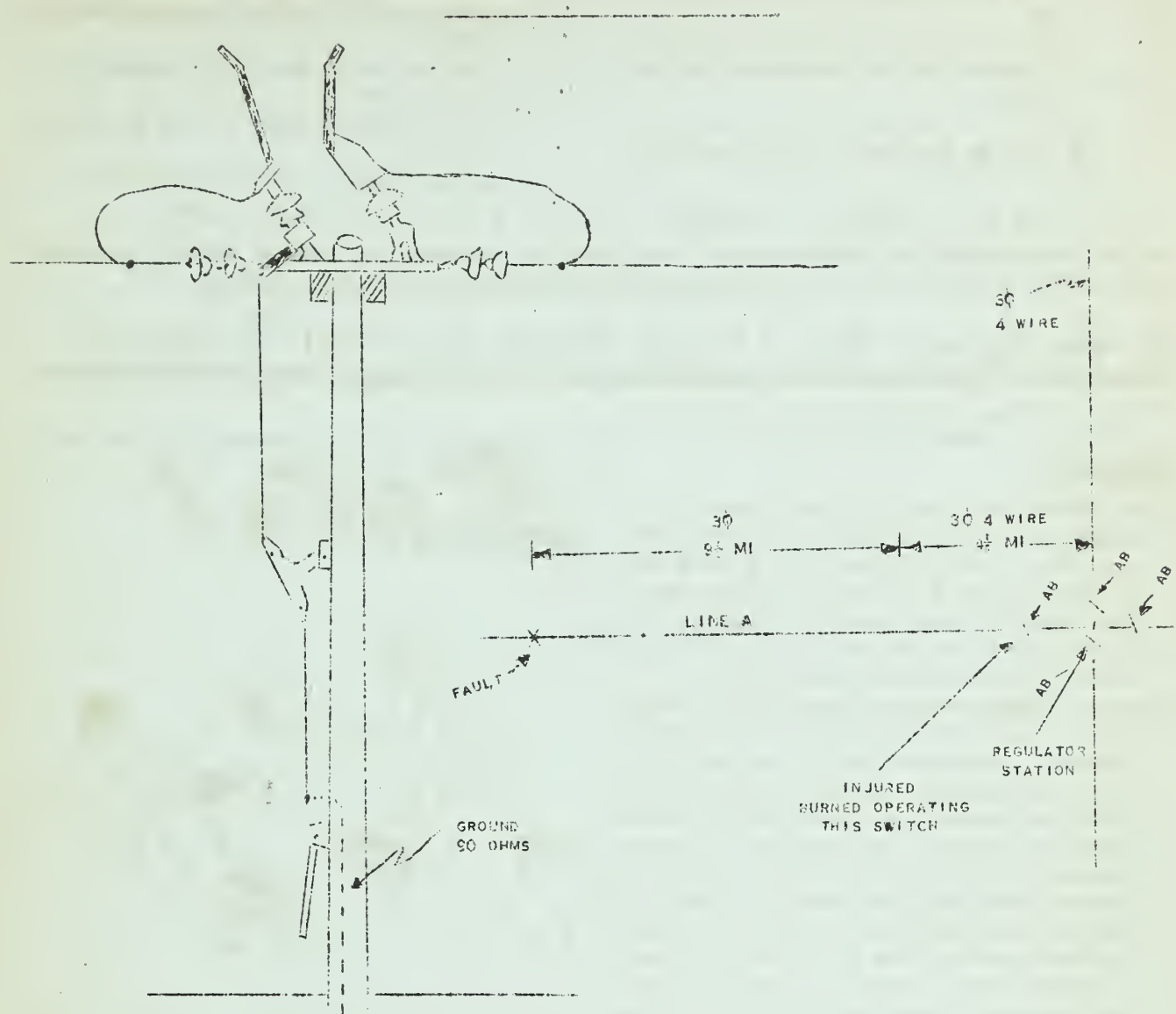


The under side of the gaff (A, fig. 1) should be filed straight and flat to within 1/16 inch of the point. This last 1/16 inch should be rounded as in

Gaffs should be replaced when this distance is 14"

(Continued on page 4)

SWITCH OPERATOR BURNED AFTER STORM



THE ACCIDENT:

After a storm, line (A) relayed. Air brake switch was opened, as indicated in sketch. Breaker was re-set. The air brake switch was then closed -- line relayed again -- switch was opened, at which time the operator was severely shocked and rendered unconscious. He suffered burns on the bottoms of both feet and in the palm of the right hand. The handle of the air brake switch was properly grounded to a ground rod driven at the base of the pole. Ground resistance measured 90 ohms. Insulators and switch mechanism were in good condition and not in contact with energized primaries or fixtures.

CAN YOU ANSWER THESE QUESTIONS?

- (1) Can you depend on grounds?
- (2) What caused this accident?
- (3) Would it be possible for current to feed back through the 14 miles of earth between switch and the fault?
- (4) What would you recommend to prevent this type of accident?

(For Our Analysis, see Page 4)

RUBBER GLOVES ARE ACCIDENT INSURANCE.

THEY ARE SAFE FOR 3000 VOLTS TO GROUND:

1. They are laboratory tested periodically.
2. Tested by physical inspection each time used.
3. They are worn inside leather protectors.

CARE OF GLOVES DETERMINES LIFE:

1. Keep free of oil, dirt, water.
2. Dry carefully after use--never put away wet.
3. Do not dry by applying heat--wipe dry with cloth.
4. Apply talcum after drying to prevent sticking.
5. Always carry in canvas glove bag.

WHY WEAR GLOVES FROM THE GROUND UP?

REA accident reports are conclusive proof that eight out of every ten fatal or serious shock accidents would have been prevented Had The Injured Worn The Gloves From The Ground Up.

RUBBER GLOVES ARE UNSAFE ABOVE 3000 VOLTS TO GROUND

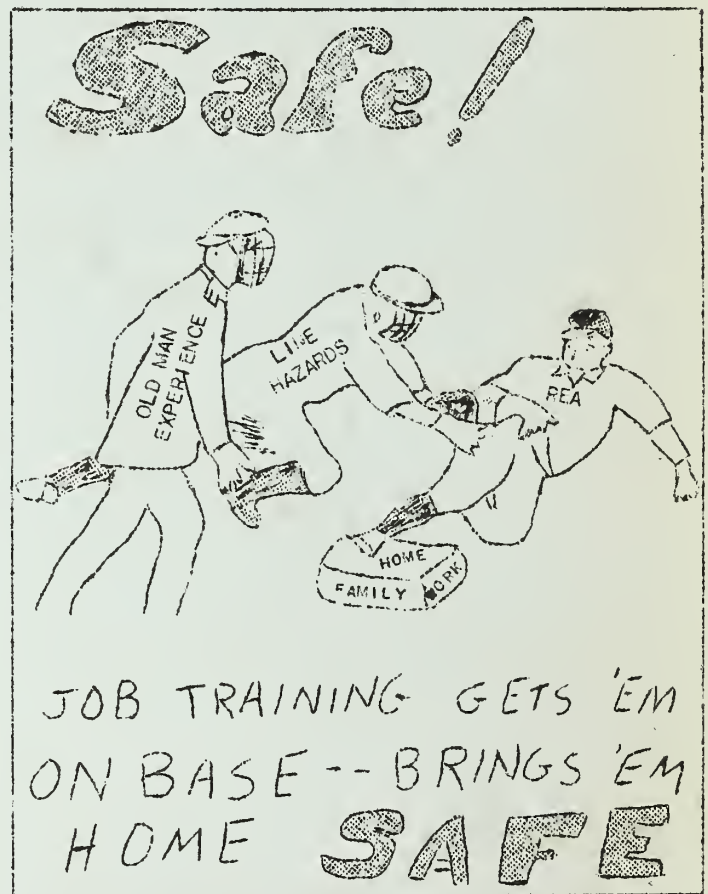
SWITCH OPERATOR BURNED

(Continued from page 3)

OUR ANSWERS:

- (1) As far as lightning is concerned--NOT Good grounds are protection against operating voltages only. Soil conditions have a great deal to do with ground resistance. Sometimes a good ground is established at 8 feet. In other instances it requires 60 feet. Good grounds can't be depended on to stay good.
- (2) It is apparent that the operating line voltage had no part in this accident. The mechanism (including insulators) was in good condition. If line voltage were involved, electric shock would have resulted the first time the switch handle was touched. Remember the switch was opened, then closed, then opened. The shock occurred after the last opening had been completed. Since there was lightning, we believe that about the instant the switch was opened an electrostatic charge was picked up along the line which flashed over the switch insulator, and went to ground through the switch operator's body. The 90 ohms resistance offered by the ground rod might have been greater than that offered by the operator's body. Lightning is no respecter of grounds. Even if the ground had been 100% perfect, such a discharge might choose the path through the operator's body instead of the ground rod.
- (3) No.
- (4) First, always wear rubber gloves when unlocking or operating any switching device. Insulators sometimes break down. Some part of the switch may be in contact with an energized wire and the switch grounding may be bad. Second, wait until lightning in immediate vicinity dies down before operating a switch or climbing a pole.

Discuss and answer these questions for yourself. See if you agree with our analysis.



SHARP GAFFS PREVENT CLIMBING ACCIDENTS

(Continued from page 2)

(fig.1). Point (X, fig.1) which is 1/16 inch from tip, should be 3/32" wide. (Fig.2) shows that point is slightly rounded when viewed from the front.

Pole gaffs were not intended for tree use, since tree bark has no holding power. These gaffs are not long enough to reach solid wood. Use ladder and ropes in trees if tree climbers are not available.